

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-030057**Date Inspected:** 17-Sep-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Bernie Docena, Tony Sherwood**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS Tower**Summary of Items Observed:**

Caltrans Quality Assurance Inspector Simion Ramirez (QA Inspector) arrived at job site. QA Inspector performed random QA visual testing (VT) of on going ABF production work and monitored the contractor quality control operations.

Tower Skirt: Skirt Plate #2, Weld Jt's #157 south shaft, #156 north shaft, #157 west shaft

ABF personnel continued fit-up and welding of each vertical PJP splice weld noted above, at skirt plate #2. The welding procedure specification (WPS) #ABF-WPS-D15-2140-3 for flux core arc welding (FCAW) was available for reference on site by QC Inspectors and welders. QC Inspector verified joint fit-up and pre-heat. QC Inspector verified electrical welding parameters at the start of shift and randomly until the end of shift. Root passes of the welds above were magnetic particle tested (MT) by QC. The root pass, intermediate pass and weld cover passes were installed in the groove on the exterior face. At locations where the root gap exceed 5mm and up to 8mm maximum the contractor utilized steel backing (12mm x 38mm), please reference RFI# ABF-RFI-003417R02. Welding of vertical weld joint 156 north shaft, 157 south shaft and 157 west shafts was completed. Weld crowns still need to be ground flush or contoured.

- The weld joint fit-up and alignment was check with a straight edge and bridge cam gauge.
- Preheat was performed by rosebud torch and verified with temperature stick (200°F).
- Welding was performed by approved welders (Rick Clayborn, Kit Li)
- The weld Procedure and joint details FWT19 & FWT21 are for a partial joint penetration (PJP) weld.
- FCAW electrode used is NR-232, .072" diameter.
- Weld passes were de-slagged by grinder and wire wheel.

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Summary of Conversations:

Communications confirming approvals for WPS ABF-WPS-D15-2140-3 and ABF-WPS-D15-2140-1.

Skirt splice, electrode NR-232, .072" diameter.



In process welding 3G splice weld at tower skirt.



Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Ramirez,Simion
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Quality Assurance Inspector

Reviewed By:	Riley,Ken
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QA Reviewer
